

Climatological Data for July, 1910.

DISTRICT No. 8, TEXAS AND RIO GRANDE VALLEY.

BERNARD BUNNEMAYER, District Editor.

GENERAL SUMMARY.

The month was marked by unusually warm and dry weather. There was only a comparatively small area in the southeastern portion of the district, centering around Beaumont, which had a decided excess of precipitation and a corresponding deficiency of temperature. Heavy precipitation occurred also, locally, in the extreme upper Trinity River Valley and in some of the mountain districts of New Mexico, but elsewhere the rainfall was conspicuously deficient. From an agricultural point of view the weather conditions during July became exceedingly discouraging, especially as the month had been preceded by unusually dry weather during June. Most of the precipitation occurred after the 10th in Colorado and New Mexico, and before the 20th in Texas.

The greatest monthly precipitation in Colorado was 2.82 inches at Platoro; in New Mexico, 5.63 inches at Aspen Grove Ranch; and in Texas, 10.29 inches at Beaumont. There was no rain at five stations in Texas, and at six other stations in Texas and at two in New Mexico the monthly amounts were less than 0.10 inch. The least monthly amount in Colorado was 0.12 inch at Garnett. Excessive precipitation of 2.50 inches or more in 24 consecutive hours occurred at the following stations in Texas: Beaumont, 4.38; Gainesville, 5.15; Galveston, 2.93; and Liberty, 2.84. There was none in New Mexico or Colorado. The number of days with 0.01 inch or more of precipitation averaged eight in Colorado, seven in New Mexico, and three in Texas.

The percentage of sunshine was large in Texas and averaged about normal in the remaining portions of the district. Destructive thunderstorms were quite numerous in New Mexico after the 10th, and a number of deaths by lightning and some loss of property occurred. These storms were of less frequency in Texas.

TEMPERATURE.

The mean temperature averaged 2.6° above the normal in Colorado, and 2.3° above in New Mexico and Texas; the excess of temperature being greatest in the middle portion of the district. In southeastern Texas and in some localities along the Gulf coast the temperature averaged somewhat less than normal. There was but little change in temperature from day to day, and the extremes were moderate on account of an absence of abnormally cool weather. The daily range averaged about 9° on the upper Texas coast and about 40° in the extreme northwestern portion of the district.

The highest and lowest temperatures reported were: In Colorado, 97° at Saguache on the 20th and 27th, and 33° at Manassa on the 15th; in New Mexico, 109° at San Rafael on the 20th, and 31° at Hopewell on the 2d; and in Texas, 119° at Tilden on the 2d, and 59° at Plainview on the 1st, at Rossville on the 5th, at Marshall on the 20th, and at Flint on the 21st. The local monthly means ranged from 63.1° to 68.2° in Colorado; from 58.2° to 84.4° in New Mexico; and from 77.2° to 94.1° in Texas. In many portions of western Texas the warm weather broke all previous records.

PRECIPITATION.

There was a general deficiency of precipitation over the Rio Grande watershed, except over a few short stretches north of El Paso. The deficiency was most marked over the Texas end, where it averaged 1.64 inch. In New Mexico the deficiency averaged 0.73 inch. The average rainfall for the watershed was 1.20 inch. The Rio Pecos watershed received slightly more moisture than that of the Rio Grande, the average being 1.40 inch, or over 1.00 inch less than the normal. Notwithstanding

these large deficiencies both watersheds received considerably more precipitation than during the preceding month. The heaviest showers occurred in their upper portions.

There was a marked deficiency of precipitation over all Texas watersheds, the shortages ranging from 0.81 inch for the coastal plains to 2.52 inches for the Guadalupe watershed. A considerable excess occurred, however, in southeastern Texas, including a limited area of the coastal plains and the lower portions of the Trinity, Neches, and Sabine watersheds. There was also an excess in one or two localities in the extreme upper Trinity watershed. The following are the average monthly amounts in inches for the various watersheds: Nueces, 0.76; San Antonio, 1.02; Guadalupe, 0.79; Lavaca, 1.66; Colorado, 0.81; Brazos, 1.12; Trinity, 2.06; Neches, 3.09; Sabine, 0.86; and coastal plains, 2.12. Compared with conditions for the preceding month there was a considerable decrease in precipitation, except over the San Antonio and Lavaca watersheds which showed an increase.

RIVER CONDITIONS.

The rivers of the districts were generally below normal and lower than during the preceding month. The discharge of some of the rivers is the lowest on record for July. The Rio Grande was unusually low at the railroad bridge west of Santa Fe and water disappeared entirely from its bed a short distance below Bernalillo, N. Mex. At the Leasburg Project, N. Mex., the flow of water in the river became too small for irrigation purposes. The lower Rio Grande, which is not dependent upon the upper portion for its water supply as it is fed by perennial streams, was also abnormally low during the entire month, but it continued to furnish sufficient water for irrigating and stock purposes. The condition of the Rio Pecos was as discouraging as that of the Rio Grande. At the Carlsbad Project, N. Mex., the river gage showed only 25 second-feet in the river. There was, however, not much demand for water for irrigation as a large acreage of alfalfa was grown for seed, and the delivery of water was suspended on the 19th. At Barstow, Tex., the stage of the river was below the zero of the gage, and the supply of water for irrigating purposes was very scanty. At the Hondo Project, N. Mex., a small supply of water was available at intervals for irrigation, but there was no water in the river bed at the close of the month.

The flow of the Guadalupe, Colorado and Brazos rivers was smaller than ever before recorded in July. Irrigating plants, obtaining their water from the lower Colorado River, were compelled to suspend operation, and the rice crop suffered accordingly. It has been estimated that the losses would aggregate \$800,000. Plans are being advocated for conserving the water of the river for use during unfavorable seasons, and it is probable that something will be done in the matter. Abnormally low stages obtained also in the Trinity, Neches, and Sabine rivers.

MISCELLANEOUS.

Local storms.—During a violent thunderstorm, which occurred at Gainesville, Tex., on the 11th, several houses and barns were struck by lightning, and five mules were instantly killed. The storm was accompanied by a torrential rain which caused washouts near the city. The precipitation amounted to 5.15 inches in a few hours.

A destructive windstorm on the 18th at Italy, Tex., demolished one residence and two barns, and damaged several other buildings. One person was killed by the débris and another seriously injured. A similar storm on the same day at Lovelace, Tex., wrecked one dwelling and damaged several others. Three persons were seriously injured.

During a severe thunderstorm on the 18th at Taylor, Tex., a large barn was struck by lightning and burned. Three blooded horses, four mules, and nine hogs perished in the flames, and much food stuff and other property was destroyed. Two persons were struck by lightning, but not killed.

Cloudbursts.—A cloudburst occurred near Bernalillo, N. Mex., on the 12th, which destroyed about 100 feet of railroad trestle spanning the Rio Grande, delayed trains and caused other damage. On the same day another cloudburst occurred in the Guadalupe Canyon, N. Mex., and sent a tremendous volume of water down the Valley of the Jemez River. Large pine trees were swept away as if they had been straws, and a number of houses in the Villa de Canyon were destroyed. Crops were badly damaged.

On the 30th a cloudburst occurred near Elota, N. Mex., and a large volume of water rushed down the Tonque Arroyo, carrying with it a considerable amount of trestle and tracks. The embankments of the railway were badly damaged and traffic was interrupted.

Hailstorm.—A severe hailstorm occurred at Jemez Springs, N. Mex., on the 12th, which was very destructive to vegetation and foliage.

Reclamation work in Texas.—The maps of the various levee districts that have been surveyed so far have been completed and are now in the hands of the engravers. The maps were made in the office of the United States Geological Survey and will show the exact location of each district where it is proposed to build levees and reclaim lands. The State Levee and Drainage commissioner will make his report to the governor of the State and the matter will then be submitted to the next legislature for further action. The preliminary work of surveying was done by officials of the United States Geological Survey.

Drainage district.—It is contemplated to create a drainage district in Galveston County, Tex., to be known as Drainage District No. 2. The land proposed for the new district lies between Dickinson and Texas City Junction and embraces about 15,000 acres. It is thought that a bond issue of about \$45,000 will cover the cost of the project.

TABLE 1.—Climatological data for July, 1910. District No. 8, Texas and Rio Grande Valley.

Stations.	Counties	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .10 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Date.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unnned.							
<i>Colorado.</i>																					
Blanca.	Costilla.	8,403	1	64.4	.....	89	17†	39	11	43	2.29	.....	0.53	0.0	9	4	27	0	sw.	L. C. Audrain.
Cumbres.	Conejos.	10,015	3	.....	.....	.....	.....	.....	.....	.....	2.00	.....	0.79	0.0	7	30	1	0	sw.	Ida M. Lively.
Garnett.	Costilla.	7,576	17	63.3	+ 1.7	90	20	35	1	47	0.12	- 1.07	0.10	0.0	2	18	6	7	sw.	Chas. Speiser.	
Hermit.	Hinsdale.	9,843	.....	.....	.....	.....	.....	.....	.....	.....	2.40	.....	0.67	0.0	10	7	14	10	.....	Marion Mason.
La Veta Pass.	Costilla.	9,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Norvin R. Lively.	
Manassa.	Conejos.	7,700	4	63.1	.....	88 ^a	20	33 ^a	15	52 ^a	1.35	.....	0.80	0.0	5	5*	18	7 ^a	se.	J. B. Chapman.
Platoro.	do.	9,675	2	.....	.....	.....	.....	.....	.....	.....	2.82	.....	0.71	0.0	17	14	13	4	w.	Walter R. Hook.
Saguache.	Saguache.	7,740	18	65.2	+ 4.0	97	20†	40	2	51	1.30	- 0.18	0.85	0.0	4	13	9	9	w.	Eugene Williams.	
San Luis.	Costilla.	7,794	19	64.6	+ 2.2	89	20	37	17	51	1.66	- 0.67	0.87	0.0	11	10	19	2	sw.	P. B. Albright.	
Wagon Wheel Gap.	Mineral.	8,434	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Eland.	
<i>New Mexico.</i>																					
Agricultural College.	Dona Ana.	3,863	44	82.5	+ 1.7	104	8†	58	2	44	1.10	- 0.74	0.60	0.0	4	2	29	0	.....	New Mexico Agri. College.
Alamogordo (near).	Otero.	4,338	9	80.3	.....	100	5†	60	10†	39	0.99	- 0.50	0.59	0.0	3	4	27	0	sw.	Geo. C. Bernis.
Alamogordo.	do.	4,320	1	.....	.....	.....	.....	.....	.....	.....	0.04	0.0	1	5	12	18	1	e.	El Paso & Southwest. R. R.	
Albuquerque.	Bernalillo.	5,000	34	.....	.....	.....	.....	.....	.....	.....	1.88	+ 0.71	1.40	0.0	4	11	2	18	se.	Pitt Ross, C. E.
Ancho.	Lincoln.	6,112	1	.....	.....	.....	.....	.....	.....	.....	0.95	0.45	0.0	0.0	2	27	4	0	sw.	El Paso & Southwest. R. R.
Artesia.	Eddy.	3,350	2	82.2	.....	106	5	50	17	45	0.03	.....	0.03	0.0	1	27	4	0	se.	Will Benson.
Aspen Grove Ranch.	Rio Arriba.	9,000	1	.....	.....	.....	.....	.....	.....	.....	5.63	.....	2.09	0.0	12	2	27	0	w.	Junius D. Maupin.
Bateman's Ranch.	do.	8,900	1	.....	.....	.....	.....	.....	.....	.....	1.74	.....	0.46	0.0	6	10	21	0	s.	John W. Bateman.
Bluewater.	Valencia.	6,732	8	70.2	.....	97	22	42	2	49	2.10	.....	0.80	0.0	9	7	24	0	sw.	Bluewater Development Co. Do.
Boaz.	Chaves.	4,154	1	80.2	.....	104	4	56	9	43	0.63	.....	0.28	0.0	4	8	23	0	s.	D. C. Savage.
Capitan.	Lincoln.	6,348	1	.....	.....	.....	.....	.....	.....	.....	2.24	.....	0.66	0.0	7	1	23	7	s.	El Paso & Southwest. R. R.
Carlsbad.	Eddy.	3,120	15	81.0	+ 3.7	108	4†	63	17	44	0.91	- 2.25	0.45	0.0	3	22	7	2	s.	U. S. Reclamation Service.	
Carrizozo.	Lincoln.	5,429	2	.....	.....	.....	.....	.....	.....	.....	0.23	.....	0.20	0.0	5	13	18	0	c.	El Paso & Southwest. R. R.
Carson Park.	Taos.	7,650	.....	.....	.....	.....	.....	.....	.....	.....	1.82	.....	0.60	0.0	6	12	19	0	.....	Lester S. Myers.
Chama.	Rio Arriba.	7,851	11	65.6	+ 0.1	94	19	41	2†	44	2.30	+ 0.09	1.90	0.0	2	15	16	0	sw.	Frank C. Johnson.	
Cloudcroft.	Otero.	8,650	7	61.9	.....	82	8	43	10†	33	2.71	.....	1.00	0.0	8	9	16	6	sw.	El Paso & Southwest. R. R.
Corona.	Lincoln.	6,636	1	.....	.....	.....	.....	.....	.....	.....	1.40	.....	0.85	0.0	3	9	12	0	s.	Do.
Coyote.	do.	5,800	1	.....	.....	.....	.....	.....	.....	.....	0.86	.....	0.32	0.0	9	12	19	0	se.	Do.
Cundiy.	Santa Fe.	6,880	1	.....	.....	.....	.....	.....	.....	.....	0.25	.....	0.11	0.0	4	9	13	9	w.	Teofilo Vilij.
Demonstration Farm.	San Miguel.	6,800	1	.....	.....	.....	.....	.....	.....	.....	0.97	.....	0.60	0.0	4	2	27	2	.....	Erb & Westerman.
Duran.	Torrance.	6,272	1	.....	.....	.....	.....	.....	.....	.....	2.36	.....	2.00	0.0	3	2	27	2	.....	El Paso & Southwest. R. R.
Elli (near).	Chaves.	7,400	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Boyd Williams.	
Escondido.	Otero.	4,014	1	.....	.....	103	9	.....	.....	.....	0.24	.....	0.09	0.0	4	5	15	11	se.	El Paso & Southwest. R. R.
Espanola.	Rio Arriba.	5,590	12	74.8	+ 2.7	99 ^b	20†	48 ^b	21	47 ^b	0.15	- 1.27	0.15	0.0	1	22	6	3	w.	Mrs. E. F. McBride.	
Estancia.	Torrance.	6,140	5	72.0	.....	94	4†	49	21	43	0.44	.....	0.16	0.0	4	15	10	6	c.	New Mex. Cent. R./R.
Fort Stanton.	Lincoln.	6,231	32	71.5	+ 2.3	97	8	50	51	44	1.57	- 1.30	0.63	0.0	8	12	12	7	w.	U. S. Sanitarium.	
Fort Sumner.	Guadalupe.	3,960	2	80.2	.....	105	4†	56	3	43	0.48	.....	0.25	0.0	5	22	8	1	se.	F. A. Manzanares.
Gallinas.	Lincoln.	6,635	1	.....	.....	.....	.....	.....	.....	.....	0.62	.....	0.50	0.0	2	18	7	6	e.	El Paso & Southwest. R. R.
Gallinas Planting Station.	San Miguel.	7,500	3	65.4	.....	87	23	42	11	39	3.57	.....	1.01	0.0	15	2	29	0	nw.	El Paso & Southwest. R. R.
Harvey's Upper Ranch.	do.	9,400	1	.....	.....	.....	.....	.....	.....	.....	0.81	.....	0.81	0.0	14	7	23	1	sc.	Simon B. Warner.
Hillsboro.	Sierra.	5,224	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. Frank I. Givens.	
Hodges.	Taos.	8,484	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.	
Hondo Reservoir.	Chaves.	3,904	1	80.9	.....	105	4	60 ^b	71	44 ^b	0.70	.....	0.64	0.0	3	17	13	1	se.	A. W. Board.
Hope.	Eddy.	4,000	3	80.9	.....	84	19	31	2	43	3.02	.....	1.25	0.0	11	3	26	3	sw.	John T. Blanton.
Hopewell.	Rio Arriba.	9,500	1	58.2	.....	.....	.....	.....	.....	.....	3.34	.....	2.00	0.0	16	7	20	4	s.	Linus L. Shields.
Jemez Springs.	Sandoval.	6,100	.....	.....	.....	.....	.....	.....	.....	.....	0.20	.....	0.20	0.0	3	18	12	1	se.	J. W. Mosley.
Knowles (near).	Eddy.	4,300	.....	80.6	.....	102	4	61	13	40	0.45	.....	0.20	0.0	2	17	4	10	se.	Gus Weiss.
Laguna.	Valencia.	5,840	5	77.2	.....	100	7†	50	61	46	0.87	.....	0.65	0.0	4	16	9	6	e.	P. A. Turnbull.
Lagunita.	Guadalupe.	4,500	5	77.6	.....	101	6	56	1†	39	0.65	.....	0.23	0.0	4	16	9	6	se.	Wm. P. Keil.
Lake Valley.	Sierra.	5,412	5	.....	.....	.....	.....	.....	.....	.....	1.58	.....	0.55	0.0	10	5	26	0	sw.	Dr. Wm. Curtiss Bailey.
Las Vegas.	San Miguel.	6,384	23	71.6	+ 2.4	97	8†	47	31	47	2.48	- 1.52	1.40	0.0	10	17	14	0	w.	H. G. Liston.	
Liston (near).	Chaves.	5,000	20	.....	.....	.....	.....	.....	.....	.....	0.96	.....	0.50	0.0	7	7	24	0	s.	Richard Pohl.
Los Lunas (near).	Valencia.	4,900	20	.....	.....	.....	.....	.....	.....	.....	1.38	.....	0.57	0.0	5	18	12	1	se.	El Paso & Southwest. R. R.
Los Tanos.	Guadalupe.	4,919	1	.....	.....	.....	.....	.....	.....	.....	2.11	.....	0.90	0.0	8	6	25	0	sw.	Wm. Pender.
Magdalena.	do.	6,557	5	73.2	.....	94	4†	46	11	43	3.01	.....	0.94	0.0	6	30	1	1	sw.	W. M. Nelson.
Mineral Hill.	San Miguel.	7,050	5	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.20	0.0	2	29	1	1	sw.	El Paso & Southwest. R. R.
Monterey.	Otero.	4,436	1	.....	.....	.....	.....	.....	.....	.....	0.29	.....	0.89	0.0	9	18	13	0	sw.	Mrs. John W. Corbett.
Mountainair.	Torrance.	6,547	8	73.4	.....	99	8	47	12	41	2.24	.....	0.20	0.0	2	18	11	2	e.	El Paso & Southwest. R. R.
Newman.	Otero.	3,989	1	.....	.....	104	3	64	17	47	0.29	.....	0.81	0.0	4	16	6	9	e.	El Paso & Southwest. R. R.
Noria.	Dona Ana.	4,114	1	.....	.....	.....	.....	.....	.....	.....	0.21	.....	0.60	0.0	4	25	3	21	s.	Jas. Brownfield, jr.
Orange.	Otero.	5,003	1	84.4	.....	108 ^b	4	60 ^b	10	37 ^b	0.25	.....	0.20	0.0	2	25	3	21	w.	El Paso & Southwest. R. R.
Orogrande.	Lincoln.	4,171	1	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.23	0.0	7	21	3	0	s.	Eugene F. Jones.
Oscura (near).	Eddy.	5,016	1	0.54	0.43	0.0	12	19	5	26	0	se.	A. M. Hove.
Otis.	Santa Fe.	3,100	1	.....	.....	.....	.....	.....	.....	.....	0.93	.....	0.63	0.0	5	26	5	0	se.	W. K. Davis.
Otto.	Taos.	6,200	1	.....	.....	.....	.....	.....	.....	.....	1.74	.....	0.73	0.0	7	13	18	0	ne.	El Paso & Southwest. R. R.
Pastura.	Guadalupe																				

TABLE 1.—Climatological data for July, 1910. District No. 8—Continued.

Stations	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of partly cloudy days.	Number of cloudy days.					
New Mexico—Cont'd.																						
Winsors.	San Miguel.	8,200	12	61.8	+ 3.0	86	9†	33	1	49	3.22	- 1.01	0.68	0.0	13	11	10	10	w.	Henry D. Winsor.		
Texas.																						
Abilene.	Taylor.	1,738	25	86.4	+ 4.2	104	30	67	1	30	0.32	- 2.08	0.24	0.0	4	18	12	1	s.	U. S. Weather Bureau.		
Albany.	Shackelford.	1,420	16	83.3	+ 6.9	107	30	65	5	35	T.	- 2.95	T.	0.0	0	26	5	0	...	N. L. Bartholomew.		
Anahuac.	Chambers.	23	1								6.67		1.46	0.0	13					B. H. Collins.		
Austin.	Travis.	503	54	85.4	+ 1.2	101	18	72	15	37	0.12	- 2.33	0.07	0.0	3	15	14	2	sw.	A. Deussen.		
Ballinger.	Runnels.	1,637	15	85.8	+ 4.2	106	18	65	19	36	0.60	- 2.44	0.60	0.0	1	23	8	0	s.	E. M. Eubank.		
Barstow.	Ward.	2,573	3								1.46		0.90	0.0	3					W. H. Denis.		
Bay City.	Matagora.	53									1.92		1.02	0.0	4	15	11	5	s.	E. C. Quereau.		
Beaumont.	Jefferson.	29	13	82.0		95	25†	67	3†	24	10.29	+ 5.53	4.38	0.0	11	9	0	22	se.	John Bender.		
Beeville.	Bee.	225	14	83.8	- 1.3	101	2	69	5†	28	T.	- 2.77	0.45	0.0	5	19	10	2	se.	L. E. Dickey.		
Big Springs.	Howard.	2,396	12	86.6		107	30	62	2	36	1.24	- 1.75	1.00	0.0	3	17	14	0	se.	B. Reagan.		
Blanco.	Blanco.	1,350	14	84.2	+ 2.7	105	18	65	20	31	1.04	- 2.49	0.40	0.0	5	26	9	0	s.	R. C. Crist.		
Berne.	Kendall.	1,412	18	84.4	+ 2.8	104	31	66	30	36	0.84	- 2.51	0.50	0.0	3	18	8	5	se.	F. W. Schweppé.		
Booth.	Fort Bend.	81	9								3.73		0.96	0.0	12	24	0	7	se.	T. R. Booth.		
Boquillas.	Brewster.												0.00	0.0	0					J. O. Langford.		
Bowie.	Montague.	1,113	16	86.4	+ 4.3	111	30	66	13	34	1.71	- 0.68	1.47	0.0	3	18	9	4	n.	Craig Anderson.		
Brazoria.	Brazoria.	25																		Mrs. M. A. Stevens.		
Brasos.	Palo Pinto.	801	1										0.39		0.24	0.0	2	15	15	1	s.	Robt. E. Boyett.
Brenham.	Washington.	350	21	85.2	+ 1.8	101	181	72	4†	29	1.26	- 1.85	0.89	0.0	7	17	5	9	sc.	Mrs. B. F. Sloan.		
Bridgeport.	Wise.	754											0.14	0.0	1	23	3	5	s.	Claude Strange.		
Brighton.	Nueces.	12	14	83.6	+ 0.6	94	1†	69	5	23	0.00	- 1.30	0.00	0.0	0	28	3	0	se.	G. H. Ritter.		
Brownsville.	Cameron.	38	21	83.8	+ 0.4	98	1	71	13	23	0.48	- 1.39	0.28	0.0	2					U. S. Weather Bureau.		
Brownwood.	Brown.	1,342	20	86.1	+ 3.1	107	30	66	20	36	0.59	- 1.51	0.42	0.0	2	20	11	0	s.	Mrs. Pearl Smith.		
Cameron.	Milan.	2		88.0							31.5		0.41	0.0	3	27	3	1	s.	J. E. Watts.		
Carmona.	Polk.	220	2	82.6		100	2†	62	21	30	4.46		1.66	0.0	7	16	14	1	s.	M. S. Spitzer.		
Clavertonville.	Fisher.	2,100	15	85.1		108	28†	60	1†	38	0.90	- 2.78	0.50	0.0	3	18	8	5	s.	Wm. Lanius.		
Coleman.	Coleman.	1,710	16	85.6	+ 5.1	103	30†	68	11	26	0.43	- 2.71	0.43	0.0	1	17	12	2	s.	J. E. Stevens.		
College Station.	Brazos.	308	13	84.0	+ 0.6	103	31	67	21	32	0.98	- 1.71	0.94	0.0	3	22*	6*	24	s.	Prof. G. S. Fraps.		
Colorado.	Mitchell.	2,066	15	85.0	+ 2.8	106	18	60	1	42	0.16	- 3.00	0.10	0.0	2					R. M. Webb.		
Columbia.	Brazoria.	34	21	82.6	+ 0.6	100	18	66	17†	33	1.10	- 3.12	0.50	0.0	3	15	1	1	s.	R. B. Loggins.		
Columbus.	Colorado.	206	6								1.94		1.26	0.0	4	6	22	3	se.	Mrs. Sophie Bridge.		
Comstock.	Valverde.	1,557	1																	E. F. Prosser.		
Corpus Christi.	Nueces.	20	23	82.3	- 0.4	94	1	73	2	20	0.16	- 1.50	0.14	0.0	2	20	9	2	se.	U. S. Weather Bureau.		
Corsicana.	Navarro.	445	21	86.7	+ 3.1	108	18	66	20†	31	0.60	- 2.05	0.57	0.0	2	28	1	2	sc.	E. L. Gibson.		
Crockett.	Houston.	350	6	83.8		102	30†	65	3†	31	2.35		0.96	0.0	5	17	12	2	s.	A. M. Rencher.		
Cuero.	DeWitt.	177	21	85.6	+ 0.6	102	18†	69	5†	29	0.62	- 2.03	0.39	0.0	3	28	1	2	s.	H. R. Frobose.		
Dallas.	Dallas.	466	21	85.0	+ 2.6	106	17	63	21†	37	0.43	- 2.97	0.38	0.0	2	20	8	0	s.	G. A. Eisenlohr.		
Danevang.	Wharton.	145	14	83.3	- 0.5	98	1	64	30	33	2.80	- 2.10	1.20	0.0	5	26	4	1	se.	H. P. Hermansen.		
Decatur.	Wise.	1,047	14								0.40	- 4.16	0.40	0.0	1	13	18	0	se.	Fort Worth & Denver Ry.		
Del Rio.	Valverde.	952	4	87.0	+ 2.3	108	4	70	5	34	0.18	- 2.04	0.18	0.0	1	28	3	0	se.	U. S. Weather Bureau.		
Devine.	Medina.	653	6	86.8		108	4	64	5	35	0.60		0.32	0.0	3	25	5	1	se.	M. A. Keller.		
Dialville.	Cherokee.	575	6	82.8		100	29	61	21	31	2.96		1.25	0.0	4	14	15	2	s.	J. M. B. Knight.		
Diley.	Frio.	569									1.04		0.92	0.0	2					John W. Miller.		
Dublin.	Erath.	1,468	15	84.6	+ 3.6	105	18	67	20	20	2.26	- 2.38	0.26	0.0	1	21	9	1	s.	Jno. O. Shafer.		
Duval.	Travis.	820	21	82.4	- 0.3	103	18	65	27	51	2.27	- 2.23	0.25	0.0	3	12	11	8	s.	J. C. Edgar.		
Eagle Pass.	Maverick.	800	21	94.1	+ 8.0	111	14	74	30	31	0.00	- 1.76	0.00	0.0	0	10	21	0	...	Jos. Metcalfe.		
Edna.	Jackson.	71									1.83		0.83	0.0	5					E. L. Faires.		
El Paso.	El Paso.	3,762	31	83.2	+ 2.7	102	8	64	10	35	0.60	- 1.53	0.59	0.0	2	16	15	0	se.	U. S. Weather Bureau.		
Encinal.	La Salle.	558	2	87.2		110	4	68	5	40	1.24		0.60	0.0	5	18	0	0	se.	H. C. Braden.		
Fairland.	Burnet.	1,000	22	85.9		109	18	68	3†	39	0.70	- 1.19	0.50	0.0	2	24	7	0	s.	R. L. Bush.		
Falfurrias.	Starr.	3		88.0		109	4	67	17†	36	0.61		0.28	0.0	4	23	6	0	se.	W. A. Gardner.		
Flatonia.	Fayette.	465	2	84.2		102	18	66	4	29	1.86		1.66	0.0	4	15	1	1	s.	Fred W. Laux.		
Flint.	Smith.	483		83.0		102	30	59	21	36	2.04		1.44	0.0	3	21	8	2	s.	F. C. C. Carter.		
Fort Clark.	Kinney.	1,050	23	86.8	+ 1.8	107	2	70	4†	31	0.52		1.41	0.29	0.0	3	23	7	1	e.	Post Hospital.	
Fort McIntosh.	Webb.	460	24	91.1	+ 3.7	111	4	74	14†	31	0.25		1.69	0.20	0.0	2	15	7	9	e.	H. H. Butz.	
Fort Stockton.	Pecos.	3,050	13	85.7	+ 5.8	107	28†	65	10†	40	0.23	- 2.02	0.13	0.0	2	24	13	0	se.	U. S. Weather Bureau.		
Fort Worth.	Tarrant.	670	15	85.0	+ 1.3	105	17	66	20	28	0.14	- 2.90	0.14	0.0	1	13	18	0	s.	Arthur Striegler.		
Fredericksburg.	Gillespie.	1,742	21	83.1	+ 2.3	100*	18†	65*	5	32*	0.33	- 2.13	0.17	0.0	3	18	12	1	s.	J. L. Hickson.		
Gainesville.	Cooke.	738	21	85.4	+ 4.2	106	17	62	11	34	0.62	- 1.68	1.65	0.0	3	21	8	2	s.	W. J. Crowley.		
Galveston.	Galveston.	69	40	81.7	- 1.3	89	31	68	19	18	6.19	+ 2.31	2.03	0.0	0	11	22	8	1	se.	J. P. Regan.	
Gateaville.	Correll.	795	6	85.4		108	18	67	62	36	0.30		0.20	0.0	2	20	11	0	...	Dr. J. E. Lay.		
Georgetown.	Williamson.	750	15	85.0	+ 2.3	106	30	68	6†	35	1.03	- 2.64	0.91	0.0	2	27	4	0	s.	Christian Fritz.		
Gonzales.	Gonzales.	299	5								0.44		0.18	0.0	4	18	12	1	s.	P. D. Sanders.		
Graham.	Young.	1,040	11	87.6	+ 4.4	114	17	63*	7	41*	0.68	- 2.13	0.28	0.0	1	21	7	7	0	...	Henry Edds.	
Grand Saline.	Van Zandt.										0.32		0.32	0.0	1	17	13	1	s.	J. H. Hancock.		
Grapevine.	Tarrant.	670	20	86.0	+ 3.4	108*	17	64	20	35*	0.47	- 3.12	0.28	0.0	3	4*	1*	1	s.	I. H. Earle.		
Greenville.	Hill.	623	7	84.8		103	17	67	5	32*	1.95</											

TABLE 1.—Climatological data for July, 1910. District No. 8—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.			Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Texas—Cont'd.																						
Lufkin.	Angelina.	325	3	81.8	+ 0.6	100	29†	62	21	30	1.43	0.73	0.0	4	19	10	2	s.	T. A. King..			
Luling.	Caldwell.	418	21	85.2	+ 0.6	103	18	68	5	28	1.00	- 1.68	0.47	0.0	6	18	13	0	s.	John Carter.		
Marathon.	Brewster.	4,043	2	77.2		97	29	60	12	30	1.30		0.85	0.9	4	10	17	4	s.	Rev. A. P. Willis.		
Marble Falls.	Burnet.	771	2								0.14		0.14	0.0	1	19	7	5	sw.	Wm. Harrison.		
Marfa.	Presidio.										0.30		0.10	0.0						R. K. Colquitt.		
Marshall.	Harrison.	375	1	82.6		101	29†	59	20	32	0.72		0.53	0.0	4	0	30	1	sw.	Lee Scott.		
Matagorda.	Matagorda.										1.35		0.95	0.0	2	23	6	2	s.	W. E. McNabb.		
Mexia.	Limestone.	537	6	82.6		103	30	63	21	33	2.13		1.00	0.0	3	10	16	5	s.	Miss Josephine Newman.		
Midland.	Midland.		3								0.73		0.50	0.0	3	16	13	2	se.	H. J. Elder.		
Mission.	Hidalgo.										4.00		1.37	0.0	11	17	11	3	s.	L. H. Romig.		
Mont Belvieu.	Chambers.	65									0.25		0.25	0.0	1					A. R. Shearer.		
Mountain View.	Pecos.					100	29	61	10	35	1.93	- 1.26	0.67	0.0	5	16	8	7	se.	Lucius W. Gosselin.		
Mt. Blanco.	Crozier.	2,750	22	80.2	+ 1.9	100	29	61	10	35	2.14	- 2.90	0.97	0.0	6	7	9	15	s.	H. C. Smith.		
Nacogdoches.	Nacogdoches.	271	11	80.4	- 0.2	97	17	63	20	25	2.14									Miss Mary Hofmann.		
New Braunfels.	Comal.	720	21								0.66		0.21	0.0	6	21	10	0	s.	J. Giesecke.		
Palestine.	Anderson.	510	28	81.6	+ 0.1	96	30	65	20	24	1.75	- 1.25	0.92	0.0	6					U. S. Weather Bureau.		
Panter.	Hood.	1,000	20								0.18	- 2.55	0.12	0.0	3					E. H. Snider.		
Pearsall.	Frio.	629									1.55		1.15	0.0	3					Ernest De Vilbiss.		
Pierre.	Wharton.	102	4								1.97		0.70	0.0	8	14	11	6	s.	R. B. Pointer.		
Plainview.	Hale.	3,370	18	78.8		100	29	59	1†	37	3.16	- 0.61	1.36	0.0	6	25	6	0	se.	J. F. Sander.		
Port Lavaca.	Cathoun.	20	9	84.3				99	1	68	4	25	1.76		1.03	0.0	3	26	4	1	s.	J. H. Bickford.
Post City.	Garza.										0.66		0.21	0.0	6	19	12	0	s.	W. L. Dodd.		
Ricardo.	Nueces.	57	1	85.3		105	3†	69	31	32	0.96		0.34	0.0	4	25	5	1	se.	Lindsay Waters.		
Riverside.	Walker.	169	6								3.30		1.70	0.0	2	23	3	5	s.	Mrs. C. W. Higdon.		
Robert Lee.	Coke.	1,850	11	86.7		105	18	60	1	38	0.09	- 1.77	0.03	0.0	1	26	5	0	s.	H. D. Pearce.		
Rockland.	Tyler.	136	6								2.13		1.10	0.0	5	16	8	7	s.	D. W. Bellamy.		
Rossville.	Atascosa.	558	3	86.4		108	2	59	5	43	0.40		0.19	0.0	4	11	10	1	sc.	W. F. M. Ross.		
Runge.	Karnes.	308	15								1.06	- 2.42	1.06	0.0	1					Reiffert & Frobose.		
Sabinal.	Uvalde.	964	6	86.4		108	3	65	4	41	0.69		0.39	0.0	3	7	15	9	c.	Jas. Johnson.		
Salado.	Bell.										0.34		0.30	0.0	2	19	8	4	s.	L. M. Crockett.		
San Angelo.	Tom Green.	1,847	19	86.6 ^d	+ 3.4	105 ^b	4	67	5	37 ^b	0.08	- 2.59	0.08	0.0	1	17	14	0	s.	Sam Crowther.		
San Antonio.	Bexar.	701	25	84.8	+ 2.4	101	18	68	5	28	1.37	- 0.85	0.45	0.0	5	19	12	0	sc.	U. S. Weather Bureau.		
San Augustine.	San Augustine.	300	1	81.8		100 ^b	29	61 ^a	20	30 ^a	1.81		0.70	0.0	9	11	16	4	s.	F. A. Wilson.		
San Juanitos.	Hidalgo.	1		91.4		109	4	69 ^a	25	35 ^a	0.78		0.78	0.0	1	13	10	8	sc.	J. B. McAllen.		
San Marcos.	Hays.	588	17	84.2	+ 1.3	100	18	66	5	29	0.77	- 3.02	0.37	0.0	3	23	0	8	s.	Miss L. C. Ford.		
San Saba.	San Saba.	1,712	6	85.2		108	18	64	19	35	0.27		0.20	0.0	2	28	0	3	s.	Jas. Burns.		
Santa Gertrudes.	Nueces.	8									0.57		0.0	4	20	8	3	s.	J. B. Wright, Jr.			
Seymour.	Baylor.	1,320	4	85.4		105	17†	65	3†	38	1.73				1					F. M. Deaver.		
Sligo.	Yoakum.										0.14		0.47	0.0	3	27	2	2	s.	F. N. Anderson.		
Somerville.	Burleson.	251	1	85.2		101	1†	69	2†	31	0.14				1	0	31	0	s.	W. A. Dolan.		
Sonora.	Sutton.	2,200	7								3.80		1.20	0.0	6	9	14	8	s.	Mike Murphy.		
Sugarland.	Fort Bend.	79	12								0.80		0.47	0.0	3	27	2	2	s.	Cunningham Sugar Co.		
Sutherland Springs.	Wilson.			89.2		105	18	74	4†	28	3.80		1.20	0.0	6	9	14	8	s.	W. A. Clark.		
Taylor.	Williamson.	583	9	84.2	+ 1.5	102	18	68	5	32	0.17	- 2.45	0.17	0.0	1	25	6	0	s.	U. S. Weather Bureau.		
Temple.	Bell.	630	16	85.2	+ 3.0	103	18	71	20†	25	0.44	- 2.00	0.20	0.0	3	26	5	0	s.	W. Goodrich Jones.		
Theodore.	Winkler.										0.59		0.44	0.0	3					W. H. Gibbs.		
Thurber.	Erath.										0.24		0.24	0.0	1					J. K. Ball.		
Tilden.	McMullen.	4		89.3 ^b		119 ^b	2	60 ^b	1	51 ^b	T.		T.	0.0	0	0	24	7	0		W. M. Kuykendall.	
Tivoli.	Refugio.										0.00		0.00	0.0	3	4	27	0	sc.	W. H. Gisler.		
Uvalde.	Uvalde.	937	2	87.2		110	4	65	56	36	0.43		0.30	0.0	3	4	27	0	sc.	F. M. Getzendaner.		
Valley Junction.	Robertson.	289	10								0.44	- 1.78	0.44	0.0	1	17	10	4	s.	T. M. Williams.		
Victoria.	Victoria.	187	12	84.8	+ 0.6	101	18†	68	4	30	1.02	- 2.87	0.70	0.0	3	29	1	8	s.	C. C. Zirjacks.		
Waco.	McLennan.	424	21	87.2	+ 2.0	105	17†	70	21	29	1.67	- 0.68	0.64	0.0	5	24	4	3	s.	E. H. Hall.		
Waxahachie.	Ellis.	556	14	85.1	+ 2.4	105	17†	61	21	33	0.83	- 2.26	0.52	0.0	3	23	6	2	s.	C. D. Longserre.		
Weatherford.	Parker.	864	21	86.2	+ 1.8	105	17	67	20	29	1.72	- 0.77	0.97	0.0	4	27	1	3	n.	Miss J. Stickfort.		
Wharton.	Wharton.	105	8	82.0		98	17†	67	5	27 ^a	2.50		1.18	0.0	5	17	2	12	s.	Mrs. F. M. Hughes.		
Wills Point.	Van Zandt.	524	5	84.8		105 ^b	20	62 ^a	10	35 ^a	0.33		0.33	0.0	1	27	3	1	s.	W. W. Gibbard.		
Zapata.	Zapata.	300	1	89.7		113	4	71	14	37	0.25		0.25	0.0	1	14	16	1	sc.	F. H. Ernest.		

* a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

** Precipitation included in that of the next measurement.

† Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

‡ Also on other dates.

§ Separate dates of falls not recorded.

\$ Data are from standard instruments not supplied by the U. S. Weather Bureau.

|| Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Estimated by observer.

¶ Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for July, 1910. District No. 8, Texas and Rio Grande Valley.*

Stations.	River basins.	Day of month.																														Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
<i>Colorado.</i>																																			
Blanca.	Rio Grande.				.02																														2.29
Cumbres.	do.				.01																													2.00	
Garnett.	do.																																	0.12	
Hermit.	do.					T.																											2.40		
La Veta Pass.	do.						T.																										2.40		
Manassa.	do.																																	1.35	
Platoro.	do.																																	2.82	
Saguache.	do.																																	1.30	
San Luis.	do.																																	1.66	
Wagon Wheel Gap.	do.																																		
<i>New Mexico.</i>																																			
Agricultural College.	Rio Grande.																																	1.10	
Alamogordo (near).	do.																																	0.99	
Alamogordo.	do.																																	0.04	
Albuquerque.	do.																																	1.88	
Ancho.	do.																																	0.95	
Artesia.	Pecos.																																	0.03	
Aspen Grove Ranch.	Rio Grande.																																	5.63	
Bateman's Ranch.	do.																																	1.74	
Bluewater.	do.																																	2.10	
Bluewater Reservoir.	do.																																		
Boax.	Pecos.																																	0.63	
Capitan.	do.																																	2.24	
Carlsbad.	do.																																	0.91	
Carizozo.	Rio Grande.																																	0.28	
Carson Park.	do.																																	1.82	
Chama.	do.																																	2.30	
Cloudcroft.	Pecos.																																	1.40	
Corona.	do.																																	0.86	
Coyote.	Rio Grande.																																	0.25	
Cundiyo.	do.																																	0.97	
Demonstration Farm.	Pecos.																																	2.36	
Duran.	do.																																	0.24	
Elk (near).	do.																																	0.15	
Escondido.	Rio Grande.																																	0.44	
Espanola.	do.																																	1.57	
Estancia.	do.																																	0.57	
Fort Stanton.	Pecos.																																	2.38	
Fort Sumner.	do.																																	0.62	
Gallinas.	do.																																	0.62	
Gallinas Ptg. Station.	do.																																	5.59	
Harvey's Upper Ranch.	do.																																	3.87	
Hillsboro.	Rio Grande.																																		
Hodges.	do.																																	0.57	
Hondo Reservoir.	Pecos.																																	0.79	
Hope.	do.																																		
Hopewell.	Rio Grande.																																	3.02	
Jemez Springs.	do.																																	3.34	
Knowles (near).	Pecos.																																	0.45	
Laguna.	Rio Grande.																																	0.87	
Lagunita.	Pecos.																																	0.65	
Lake Valley.	Rio Grande.																																	1.88	
Las Vegas.	Pecos.																																	0.96	
Liston.	do.																																	0.29	
Los Lunas (near).	Pecos.																																	1.38	
Los Tanos.	do.																																	2.11	
Magdalena.	Rio Grande.																																	3.01	
Mineral Hill.	Pecos.																																	0.30	
Monterey.	Rio Grande.																																	0.30	
Mountainair.	do.																																	0.29	
Newman.	do.																																	0.81	
Noria.	do.																																	0.25	
Orange.	do.																																	0.30	
Orogrande.	do.																																	0.54	
Oscuro.	do.	</																																	

TABLE 2.—*Daily precipitation for July, 1910.* District No. 8—Continued.

TABLE 2.—*Daily precipitation for July, 1910. District No. 8—Continued.*

Stations.	River basins.	Day of month.																													Total			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Texas—Cont'd.																																		
New Braunfels.	Guadalupe.																																	
Palestine.	Trinity.	.01	.12	.86			.70																										1.76	
Panter.	Brazos.	.03																															0.18	
Paersall.	Nueces.																																1.55	
Pierce.	Colorado.	.09																															1.97	
Plainview.	Brazos.	.21	.08																														3.16	
Port Lavaca.	Coast.																																	
Post City.	Brazos.																																	
Ricardo.																																	0.96	
Riverside||.	Trinity.																																3.30	
Robert Lee||.	Colorado.																																0.09	
Rockland||.	Nueches.																																2.13	
Rossville.																																	0.40	
Runge.	San Antonio.																																1.06	
Sabinal.	Nueces.	.10																															0.69	
Salado.	Brazos.																																0.34	
San Angelo.	Colorado.																																0.08	
San Augustine.	San Antonio.																																1.37	
San Juanito.	Neches.	.01																															T.	1.81
San Marcos||.	Coast.																																0.78	
San Saba.	Guadalupe.	.37																															0.27	
Santa Gertrudes||.	Colorado.																																1.73	
Seymour.	Coast.																																0.14	
Sligo.	Brazos.																																3.80	
Somerville.	Colorado.																																0.80	
Sonora.	Brazos.																																0.44	
Sugartland.	Rio Grande.																																0.59	
Sutherland Springs.	Brazos.																																0.24	
Taylor.																																	T.	0.00
Temple||.																																	0.42	
Theodore.	Pecos.																																0.02	
Thurber.	Brazos.																																1.02	
Tilden.	Nueces.																																1.67	
Tivoli.	Guadalupe.																																0.83	
Uvalde.	Nueces.	.03																															0.53	
Valley Junction||.	Brazos.																																2.50	
Victoria||.	Guadalupe.	.05																															0.33	
Waco||.	Brazos.	.12	T.	.64																													0.25	
Wahashie||.	Trinity.																																	
Weatherford||.																																		
Wharton||.	Colorado.																																	
Wills Point.	Sabine.																																	
Zapata.	Rio Grande.																																	

TABLE 3.—Maximum and minimum temperatures at selected stations, July, 1910 District No 8, Texas and Rio Grande Valley.

Texas.

Date.	Del Rio.	El Paso.			Fort McIntosh.			Fort Stockton.			Fort Worth.			Galveston.			Hallettsville.			Houston.			Lufkin.			Palestine.			Plainview.			San Antonio.			Key hour.			Taylor.
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1...	101	73	99	72	107	80	100	70	92	71	85	78	100	78	93	71	91	70	88	71	89	59	99	75	93	68	95	73	98	74	98	74	95	73				
2...	105	77	100	65	109	80	107	67	98	70	85	75	100	75	92	75	97	72	96	76	91	64	100	74	85	66	97	71	98	74	97	71	95	73				
3...	107	78	100	75	110	80	106	88	97	70	92	83	95	75	89	66	95	72	91	68	100	60	101	72	101	65	98	71	98	71	98	72						
4...	108	74	101	70	111	80	107	70	92	72	83	69	91	69	82	66	90	70	88	69	97	60	96	71	98	65	98	72	98	71	98	72						
5...	101	70	101	77	103	78	108	68	97	72	84	69	92	72	87	73	92	70	86	72	98	64	93	68	100	67	91	68	98	71	98	72						
6...	96	78	98	75	103	80	104	72	95	74	85	79	93	77	90	76	90	75	89	74	98	70	95	75	102	75	94	74	94	74	94	74						
7...	99	78	97	65	104	80	103	78	92	70	85	80	94	74	91	75	91	71	89	67	92	63	97	75	101	73	97	75	96	72	96	72						
8...	99	71	102	73	103	78	107	74	92	70	85	79	94	74	90	74	91	71	88	67	93	62	97	70	100	70	96	72	96	72	96	72						
9...	98	76	101	76	104	80	107	74	92	74	86	79	93	73	90	74	90	72	89	74	91	64	95	73	99	75	99	73	99	74	99	73						
10...	96	78	93	64	102	80	98	65	90	74	87	79	94	75	89	75	94	72	90	74	96	60	96	76	96	69	95	74	96	74	95	74						
11...	96	75	84	64	104	80	98	66	92	74	86	79	93	74	89	75	91	71	90	74	89	60	92	72	90	70	92	73	95	72	95	73						
12...	94	74	80	67	98	78	93	65	95	75	87	80	94	73	89	75	91	70	91	74	83	63	94	70	88	68	95	72	95	72	95	72						
13...	96	76	88	70	98	74	94	68	92	72	84	72	92	73	88	74	92	72	89	72	94	64	96	74	90	71	94	72	94	72	94	72						
14...	96	72	92	74	90	74	100	67	93	72	87	79	96	71	90	74	90	72	89	72	92	64	93	72	97	73	93	71	93	72	93	71						
15...	96	76	92	70	100	74	100	69	96	76	87	80	96	73	92	75	94	73	87	74	92	65	94	74	99	74	99	74	99	74	99	74						
16...	98	75	91	71	99	80	100	71	101	77	86	80	97	71	93	74	93	72	90	73	94	64	96	74	101	72	96	72	96	72	96	72						
17...	97	74	90	69	100	80	101	65	105	78	87	79	98	73	92	73	97	73	93	73	98	65	98	73	105	73	98	74	100	74	98	74						
18...	103	74	96	67	104	80	103	64	100	80	87	79	101	75	93	74	91	73	95	74	95	69	101	74	98	73	98	74	98	73	98	74						
19...	96	79	95	74	102	80	98	67	90	75	84	86	99	79	88	77	90	73	88	72	89	63	93	73	90	74	90	74	90	74	90	74						
20...	98	71	94	69	99	80	98	68	90	66	86	74	96	75	88	72	88	63	86	65	93	62	95	73	94	68	98	72	98	72	98	72						
21...	97	76	96	73	101	78	100	67	94	67	85	77	100	72	92	73	93	62	80	66	93	63	96	73	100	69	97	71	95	71	95	71						
22...	98	77	95	74	103	80	103	71	98	72	86	80	99	74	92	74	90	73	97	66	97	73	103	73	97	73	98	73	98	73	98	73						
23...	98	76	95	69	103	80	105	73	98	77	86	81	96	75	92	74	93	73	92	75	96	70	96	74	103	74	98	74	98	74	98	74						
24...	99	77	95	73	104	80	106	75	98	75	88	81	97	77	92	74	93	73	90	74	95	75	97	75	102	79	98	75	98	75	98	75						
25...	98	76	96	71	104	80	105	72	100	76	87	80	100	74	92	74	97	73	92	74	96	68	97	74	103	71	99	74	99	74	99	74						
26...	98	75	95	75	103	80	104	72	96	78	86	77	97	74	89	76	93	72	93	75	96	62	96	74	104	76	96	75	96	75	96	75						
27...	97	75	94	73	102	79	100	70	94	74	87	78	98	73	90	74	91	69	92	72	96	59	95	73	101	75	94	73	98	74	98	73						
28...	99	76	95	68	104	80	104	72	99	77	87	80	98	75	93	74	95	70	94	74	98	63	98	73	103	77	98	74	98	74	98	74						
29...	100	76	97	73	106	80	105	74	101	78	87	80	101	74	94	74	100	75	95	73	100	64	99	74	104	76	100	75	98	75	98	75						
30...	99	75	98	73	105	78	103	75	102	78	87	78	100	74	95	72	100	70	94	74	98	70	100	73	105	72	101	74	101	74	101	74						
31...	99	75	97	74	103	78	102	65	97	80	89	80	100	73	95	73	100	70	94	73	91	66	99	72	100	73	100	72	100	72	100	72						
Mns	98.8	75.2	95.4	71.0	103.1	79.1	102.2	69.2	95.8	74.2	86.0	77.4	96.6	74.0	90.7	73.5	92.8	70.7	90.9	72.2	93.5	64.0	96.5	73.1	98.7	72.2	95.8	72.7	95.8	72.7	95.8	72.7						